

IN THE CLAIMS

Please amend the claims as indicated below.

1. (currently amended) A contoured structural member, comprising:
an inner section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;
an outer section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;
at least one intermediate layer having a ~~ribbed~~ honeycomb core structure connecting the inner section and the outer section; and
a structural component.
2. (original) The structural member of claim 1, wherein the structural member has a closed configuration.
3. (previously presented) The structural member of claim 1, wherein the inner section contains both a layer of a composite material and a layer of a metal-containing material.
4. (previously presented) The structural member of claim 1, wherein the outer section contains both a layer of a composite material and a layer of a metal-containing material.
5. (previously presented) The structural member of claim 1, wherein the metal-containing material is a metal alloy.
6. (original) The structural member of claim 1, further comprising at least one initiator.
7. (currently amended) A contoured structural member, comprising:
an inner section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;
an outer section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;

at least one intermediate layer having a ~~ribbed~~ honeycomb core structure connecting the inner section and the outer section; and
a structural component.

8. (previously presented) The structural member of claim 7, wherein the inner section contains both a layer of a composite material and a layer of a metal-containing material.

9. (previously presented) The structural member of claim 7, wherein the inner section contains both a layer of a composite material and a layer of a metal-containing material.

10. (previously presented) The structural member of claim 7, wherein the shape of the structural member allows the structural member to be a component of a vehicle.

11. (original) The structural member of claim 7, further comprising at least one initiator.

12. (original) The structural member of claim 1, wherein the composite material is a reinforced resin matrix material.

13. (original) The structural member of claim 7, wherein the composite material is a reinforced resin matrix material.

14. (previously presented) The structural member of claim 1 or 7, wherein both the inner section and the outer section comprise a composite material.

15. (previously presented) The structural member of claim 1 or 7, wherein both the inner section and the outer section comprise a metal-containing material.

16. (canceled)

17. (previously presented) The structural member of claim 1 or 7, wherein the structural component comprises a bracket, fastener, coupler, cap, or the like.

18. (previously presented) A contoured structural member, comprising:
an inner section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;
an outer section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;
at least one intermediate layer having a honeycomb structure connecting the inner section and the outer section; and
a structural component.

19. (previously presented) A closed, contoured structural member, comprising:
an inner section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;
an outer section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;
at least one intermediate layer having a honeycomb structure connecting the inner section and the outer section; and
a structural component.

20. (previously presented) A contoured structural member, comprising:
an inner section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;
an outer section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;
at least one intermediate layer having a honeycomb structure being substantially contiguous with the inner section and the outer section; and
a structural component.

21. (currently amended) A method for making a contoured structural member, comprising:

providing an inner section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;

roll wrapping at least one intermediate layer over the inner section, the at least one intermediate layer having a ~~ribbed~~ honeycomb core structure;

providing an outer section over the at least one intermediate layer, the outer section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;

connecting the inner and outer sections to the at least one intermediate layer; and
attaching a structural component.

22. (previously presented) The method of claim 21, including providing the inner section by roll wrapping the inner section over a substrate.

23. (previously presented) The method of claim 22, including providing the outer section by roll wrapping the outer section over the at least one intermediate layer.

24. (original) The method of claim 23, further including removing the substrate.

25. (original) The method of claim 24, including partially or completely filling the interior created by removing the substrate.

26. (previously presented) The method of claim 25, further including constraining the outer section when connecting the inner and outer sections to the at least one intermediate layer prior to removing the substrate.

27. (previously presented) The method of claim 26, including constraining the outer section by roll wrapping at least one layer of a shrink-wrap material over the outer section.

28. (original) The method of claim 27, including removing the at least one layer of the shrink-wrap material after the reaction.

29. (previously presented) The method of claim 27, further including providing at least one pressure distributor over the outer section.

30. (original) The method of claim 29, including providing a plurality of layers of shrink-wrap material with the at least one pressure distributor between two of said layers.

31. (currently amended) A method for making a contoured structural member, comprising:

roll wrapping an inner section containing a plurality of contoured layers comprising a composite material or a metal-containing material over a substrate;

roll wrapping at least one intermediate layer over the inner section, the at least one intermediate layer having a ribbed honeycomb core structure;

roll wrapping an outer section over the at least one intermediate layer, the outer section containing a plurality of contoured layers comprising a composite material or a metal-containing material;

connecting the inner and outer sections to the at least one intermediate layer;

removing the substrate; and

attaching a structural component.

32. (canceled)

33. (previously presented) The method of claim 31, the structural member further comprising at least one initiator.

34. (previously presented) A method for making a contoured structural member, comprising:

roll wrapping an inner section containing a plurality of contoured layers comprising a composite material or a metal-containing material over a substrate;

roll wrapping at least one intermediate layer over the inner section, the at least one intermediate layer having a ribbed structure; and

roll wrapping an outer section over the at least one intermediate layer, the outer section containing a plurality of contoured layers comprising a composite material or a metal-containing material;

constraining the outer section with a shrink-wrap material;

connecting the inner and outer sections to the at least one intermediate layer;

removing the shrink-wrap material and the substrate; and

attaching a structural component.

35. (canceled)

36. (currently amended) A contoured structural member made by the method comprising:

providing an inner section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;

roll wrapping at least one intermediate layer over the inner section, the at least one intermediate layer having a ~~ribbed~~ honeycomb core structure;

providing an outer section over the at least one intermediate layer, the outer section containing a continuous plurality of contoured layers comprising a composite material or a metal-containing material;

connecting the inner and outer sections to the at least one intermediate layer; and

attaching a structural component.

37. (currently amended) A contoured structural member made by the method comprising:

roll wrapping an inner section containing a plurality of contoured layers comprising a composite material or a metal-containing material over a substrate;

roll wrapping at least one intermediate layer over the inner section, the at least one intermediate layer having a ~~ribbed~~ honeycomb core structure;

roll wrapping an outer section over the at least one intermediate layer, the outer section containing a plurality of contoured layers comprising a composite material or a metal-containing material;

connecting the inner and outer sections to the at least one intermediate layer;

removing the substrate; and

attaching a structural component.

38. (currently amended) A contoured structural member made by the method comprising:
roll wrapping an inner section containing a plurality of contoured layers comprising a composite material or a metal-containing material over a substrate;

roll wrapping at least one intermediate layer over the inner section, the at least one intermediate layer having a ~~ribbed~~ honeycomb core structure; and

roll wrapping an outer section over the at least one intermediate layer, the outer section containing a plurality of contoured layers comprising a composite material or a metal-containing material;

constraining the outer section with a shrink-wrap material;

connecting the inner and outer sections to the at least one intermediate layer;

removing the shrink-wrap material and the substrate; and

attaching a structural component.

39. (canceled)

40. (new) A contoured structural member, comprising:
an inner section containing a continuous plurality of contoured layers comprising a composite material;

an outer section containing a continuous plurality of contoured layers comprising a composite material;

at least one intermediate layer having a ribbed structure connecting the inner section and the outer section; and
a structural component.

41. (new) A method for making a contoured structural member, comprising:
providing an inner section containing a continuous plurality of contoured layers comprising a composite material;
roll wrapping at least one intermediate layer over the inner section, the at least one intermediate layer having a ribbed structure;
providing an outer section over the at least one intermediate layer, the outer section containing a continuous plurality of contoured layers comprising a composite material;
connecting the inner and outer sections to the at least one intermediate layer; and
attaching a structural component.

42. (new) A contoured structural member made by the method comprising:
providing an inner section containing a continuous plurality of contoured layers comprising a composite material;
roll wrapping at least one intermediate layer over the inner section, the at least one intermediate layer having a ribbed structure;
providing an outer section over the at least one intermediate layer, the outer section containing a continuous plurality of contoured layers comprising a composite material;
connecting the inner and outer sections to the at least one intermediate layer; and
attaching a structural component.